

Hood Canal Bridge News Retrofit and East-Half Replacement Project

Fall 2002



Herb Beck, Port of Port Townsend commissioner, reflects on life 20 years ago without the Hood Canal Bridge.

'Life here in the

south (Jefferson)

county is com-

pletely wrapped up

in that bridge.

Port of Port Townsend

- Herb Beck

Commissioner

erb Beck is no stranger to the inconveniences that arise as the result of not being able to travel across the Hood Canal Bridge.

Many residents of the Olympic and

Kitsap peninsulas remember the challenge of crossing the Hood Canal when the west half of the bridge sank in February 1979 during a severe winter storm. Beck, a long time resident of Quilcene, is now a Port of Port Townsend commissioner who as a member of the Peninsula Regional Transportation Planning Or-

ganization (PRTPO) is working with the Washington State Department of Transportation (WSDOT) to ease the impacts on a region that depends on the Hood Canal Bridge to link the two peninsulas.

"I remember when I heard that the bridge had blown down," recalls Beck. "I went down and took a look, I couldn't believe it."

Beck, a retired navy employee of 33

years, used the bridge daily to report to duty in Keyport. His usual 64-mile roundtrip increased to a 160-mile round trip in a carpool organized by Jefferson County Transit that traveled through Tawanoh.

"I had three young kids that I felt like I never saw," said Beck. "With the extra travel time, I felt like I had just enough time to get up, travel to work,

come home, eat and go to bed. The next morning I would get up and do it all over again."

That unexpected closure lasted three *Please see more* **BECK** *on page 5*

Hood Canal Bridge project rides TPEAC 'fast track'

If all goes according to plan, the Washington State Department of Transportation (WSDOT) will begin construction of the Hood Canal Bridge east-half replacement and west-half retrofit project early next year.

But before WSDOT hires "Bob the Builder", the agency will have spent years ensuring the construction work will have limited impacts on the natural environment. In fact, more work goes into replacing half of a major structure, such as the Hood Canal Bridge, than one might think. Aside from the years of design and months of construction, before anything can happen, environmental assessments and studies need to be completed to protect the longevity of affected species in the project area.

For the first time, the department is involved in a different practice for acquiring the necessary permits. The new practice, which is aimed at streamlining the permit process, involves a team called the Transportation Permit Efficiency and Accountability Committee (TPEAC).

The Department of Transportation's environmental studies of the Hood Canal Bridge Retrofit and East-Half Replacement project have been extensive. The studies took 18 months and resulted in an assessment that was approved in May by the Federal Highways Administration, who found no significant impacts.

Once the assessment was complete it was given to the public for comments. WSDOT environmental engineer Jeff Sawyer said one of the key issues concerning the public is construction of the pontoons and anchors.

"The pontoons and anchors have to be built on or around water. It can't be done on site, so we have to take into consideration the impacts to the habitat at the building site as well," Sawyer said, "For example, if the pontoons are built on the Blair waterway shoreline in Tacoma (like the pontoons for the west-half replacement were), the juvenile salmon in the area must be protected. The young fish need to hug the shoreline Please see more TPEAC on page 4

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Did you know? Hood Canal Bridge facts to amaze your friends

Bridge History

- Construction of the State Route (SR) 104
 Hood Canal Bridge began January 1958
 and was opened to traffic on August 12,
 1961.
- The Hood Canal Bridge was the second concrete pontoon floating bridge constructed on Washington's highway system.
- It is the world's longest floating bridge on saltwater and one of the few floating bridges over a salt-water tidal basin.
- Cost to construct the original bridge was \$26,630,000.
- The Washington Highway Commission at the request of the Washington State Senate named the Hood Canal Bridge in honor of William A. Bugge on July 12, 1977. William A. Bugge was director of the Department of Highways from 1949 to 1963, and was a leader in the planning and construction of the bridge.
- The west half of the bridge failed and sank on February 13, 1979 during a storm carrying wind gusts of 120 miles per hour and sustained winds of 85 miles per hour.

The west half was rebuilt and opened to traffic in October 1982.

- The pontoons for the floating bridge were constructed at a graving dock on the Hylebos Waterway (the draw span was built on the Duwamish River in Seattle) and towed by tugs to the bridge site.
- Construction costs for the 1980 replacement of the west half and rehabilitation
 of the east half of the bridge was \$143
 million.

Physical Details

- The east half of the bridge consists of 17 pontoons, 10 pontoons of which are in the draw span area.
- The overall bridge length is 7,869 feet (approximately 1.5 miles). It has a center draw opening of 600 feet.
- Depth of water below floating pontoon is 80 to 340 feet
- The anchors holding the bridge in place are 685 to 1,875 tons a piece and are attached to the bridge by 3-inch cables.
- Average daily traffic across Hood Canal Bridge is approximately 14,000 vehicles.

Peak volumes reach 18,000 vehicles on summer weekends.

- The bridge is exposed to tide swings of 16.5 feet.
 - During inclement weather, the draw span is retracted (closing the bridge to vehicle traffic) when winds of 40 miles per hour or more are sustained for 15 minutes.

Project Details

- Construction cost: \$234 million. Construction begins in May 2003.
- The project not only replaces the east half floating portion of the bridge, but also constructs a wider and safer roadway for motorists, bicyclists and pedestrians.
- In order to remove and replace the approach sections on the east and west end
 of the bridge, two three-day closures will
 occur in the Spring of 2005 (Friday
 evening to early Tuesday morning)
- Replacement of the floating portion requires 8-week closure from May-June 2006.

The Hood Canal Bridge Fall 2002 Update is published by the Washington State Department of Transportation's Olympic Region.

For more project information, contact:

Project Manager John Callahan WSDOT Port Orchard Project Office 8293 Spring Creek Rd. Port Orchard, WA 98367-8192 Phone: (360) 874-3000 E-mail: orportorchard@wsdot.wa.gov

Additional project information is available on-line at www.wsdot.wa.gov/projects/sr104hoodcanalbridgeeast/.

WSDOT traffic impact and project construction updates are available online at www.wsdot.wa.gov/regions/olympic/construction or by calling 1-800-695-ROAD (7623).

Traffic information for the SR 104 Hood Canal Bridge is available by calling 1-800-419-9085. Weather and roadway conditions are available on-line at www.wsdot.wa.gov/traffic.

June public meetings provide citizens updates

In early June 2002, three public meetings were held to present a comprehensive overview of the upcoming Hood Canal Bridge project. The meetings occurred in Sequim, Chimacum and Poulsbo.

A two-part presentation was given on the bridge project. The first part was a detailed look at each of the elements of the bridge replacement and retrofit given by Patrick Clarke, WSDOT Bridge and Structure Office engineer.

Part two of the presentation was given on

the final elements of the closure mitigation plan by John Callahan, project manager. Prior to and following the presentation, there was an opportunity to view information and offer comments.

The two most common comments were related to medical transportation and parking availability during the eight week closure. WSDOT is currently working with medical providers, local hospitals, insurance carriers, and transit agencies to further iden-

Please see more **MEETINGS** on page 4

On-line bridge and peninsula resources:

Hood Canal Bridge Project

www.wsdot.wa.gov/projects/sr104hoodcanalbridgeeast/

Jefferson Transit

http://www.jeffersontransit.com

Clallam Transit

http://www.clallamtransit.com/

Kitsap Transit

http://www.kitsaptransit.org/

General government information

www.access.wa.gov



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Not Your Typical Want Ad: 12 Floating Bridge Pontoons, Anyone?

he Washington State Department of Transportation (WSDOT) is taking the recycling mantra, "One man's junk is another man's treasure," to heart.

In August, the department advertised a notice of a sealed bid auction for people interested in pontoons from the Hood Canal Bridge East-Half replacement project. That means the bridge you drive on today could be someone's new port breakwater or something even more creative.

"Pontoons are not something we can easily dispose of," said Delori Soukup, WSDOT right-of-way agent. Soukup said the estimate for disposing the pontoons without the auction process would be \$9.2 million. So by way of auction the sale benefits the buyer, the department, and most importantly, saves money for the citizens of the state of Washington.

The 12 pontoons, which come in various sizes and weigh up to 5,000 tons apiece, will be available in 2007, after the bridge's east half is replaced.

"This is the second time WSDOT has auctioned pontoons," said Soukup, who has received 20 inquiries to date, including calls from prospective buyers in Alaska who have experienced the benefits of using a recycled pontoon from the I-90 Bridge already.

Buyer selection depends not only on price, but size as well. Bids requesting larger sections of pontoons will be preferred be-



Placement of pontoons C & D during reconstruction of the Hood Canal Bridge west half. WSDOT is looking for buyers interested in east-half pontoons.

cause the pontoons are connected. This reduces agency dismantling costs.

Replacing the pontoons is necessary because the current pontoons on the east half of the bridge are undersized for the wind and wave conditions of the Hood Canal. In February 1979, a storm destroyed the west half

of the bridge when its pontoons could not maintain in the conditions. The eastside is vulnerable to the same event.

The bids will be open October 15 and the buyers will be selected shortly thereafter. To participate in the auction, contact Delori Soukup at (360) 357-2718.

HCB replacement and retrofit project frequently asked questions

During the 8-week closure to replace the east floating portion of the bridge, why not use a pontoon (Military style floating bridge) to maintain the link between the Kitsap and Olympic Peninsulas?

A: There are two main reasons why the Military style floating bridge is not a feasible option. First, these types of bridges are not meant for an application such as this.

The Hood Canal experiences tidal fluctuations of up to 16.5 feet and strong wind and waves which would require an anchoring system similar to that which exists on the permanent structure which would not be feasible for such

a short duration. Second, marine traffic has the right of way and must be allowed passage at all times.

There would be no draw span on this type of temporary bridge and therefore, would block marine traffic. In addition, there would be safety concerns.

: Why not use a vehicle ferry between Lofall and Southpoint across the canal during the 8-week closure to replace the east floating portion of the bridge?

A: A vehicle ferry directly across the Hood Canal is the most direct route but would not even come close to approaching the normal bridge

traffic. In addition, limited funds for alternative service and insurmountable environmental concerns make this option prohibitively expensive.

Q: Will there be tolls on the new bridge?

A: This project is fully funded through the legislature and therefore will have no tolls.

Q: Why isn't the bridge being widened to four lanes?

: The current project to replace the Hood Canal Bridge is funded to only preserve and maintain the existing structure not to provide capacity improvements.

Q: How many people drive across the bridge each day?

A: During the weekdays, about 14,000 cars per day cross the bridge. During the weekends that number rises to 18,000 cars per day.

Have a question?

Hood Canal Bridge Project

WSDOT Port Orchard Project Office 8293 Spring Creek Rd. Port Orchard, WA 98367-8192 Phone: (360) 874-3000

E-mail: orportorchard@wsdot.wa.gov Hood Canal Bridge News Fall 2002

TPEAC

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because they won't survive in the deep water. Pontoons could get in their way."

The documentation (study and assessment) is just half of the environmental process that is adhered to by WSDOT for a project such as this. The next stage is obtaining environmental permits to construct the project.

TPEAC was established by the Legislature in 2001 in response to recommendations by the Governor's Blue Ribbon Commission on Transportation. The Commission found that costs and delays incurred during the environmental permitting process could drive overall project costs up by as much as 30 percent. TPEAC is developing a onestop permitting process for transportation projects that includes coordinated environmental permit reviews and approvals by federal, state, and local permitting agencies. This streamlined permitting process helps WSDOT reduce delays, reduce the potential for redesign costs, minimize potential problems from conflicting regulations, and coordinate reviews. The Hood Canal Bridge project was selected as a pilot project to test this new process.

For each pilot project, an interdisciplinary team (IDT) is formed. The IDT is made up of people who write permits for various agencies. Membership of the IDT for the Hood Canal Bridge East-Half Replacement project consists of four required state agencies – Transportation, Ecology, Fish and Wildlife

Meetings

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tify how to accommodate necessary medical trips across the Hood Canal (See page 5, "Olympic Peninsula medical leaders begin prep for 2006 HCB closure").

Long-term secure parking will be available in both Kitsap and Jefferson counties. Those people using the passenger only foot ferry across the Hood Canal will be allowed to leave their vehicles at the park-and-ride lot for the duration of the closures 24 hours a day.

Overall, more than 200 local community members received information about the Hood Canal Bridge project .

RIGHT: An aerial view of the South Point passenger ferry terminal scheduled to operate during the May 2006, 8-week bridge closure.



Graving dock where the pontoons and bridge anchors for the west half of the Hood Canal Bridge were constructed. Sites like this face significant environmental review, a permitting process that continues for the new project.

and Natural Resources, as well as local agencies with permitting jurisdiction – Jefferson and Kitsap counties. Although federal agencies are not required to participate in the TPEAC process, several with a vested interest are participating voluntarily. Those federal agencies are U.S. Department of Fish and Wildlife, the US Coast Guard, Army Corps of Engineers and the National Oceanographic and Atmospheric Administration (NOAA).

Vicki Steigner, WSDOT system planning engineer, and facilitator for the Hood Canal IDT, said it has been an advantage having all of the agencies together at the table.

"Right now we're looking at new and innovative contracting methods to minimize environmental impacts. If changes need to be made, everyone is right there and we aren't having to send out 50 updates," Steigner said.

Currently the committee is halfway completed with its work and beginning step four of its six-step permitting process.

If you would like information on the Hood Canal Bridge replacement TPEAC, contact Jeff Sawyer at (360) 357-2713 or via e-mail at SawyerJ@wsdot.wa.gov.



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Olympic Peninsula medical leaders begin prep for 2006 HCB closure

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- John Donahue,

WSDOT Planner

Scheduling illnesses or postponing medical emergencies for convenient days and times would certainly be nice, but unfortunately it is not a reality.

What is a reality? The Hood Canal Bridge

will be closed for eight weeks starting May 2006 and people requiring medical related transportation need to be accommodated.

Recently, representatives from the Washington State Department of Transportation (WSDOT), medical care agencies, emergency medical teams and tribal groups met to begin preparing alternatives for transporting those in need during the planned closure.

At an August 22 forum held in Port Townsend, 34 medical providers from the

communities surrounding the Hood Canal Bridge convened to discuss the ramifications of the bridge closure. This group formed work teams based on their primary medical interests (emergency services, non-emergency transportation, and facilities) and participated in a brainstorm session designed to identify, prioritize and address potential problems that may arise during the bridge closure.

Teams were formed based on the priority problems and these teams were tasked with researching possible solutions for further consideration.

John Donahue, WSDOT corridor plan-

ning team leader, said many good ideas came out of the meeting.

"The group was highly motivated to address concerns and was able to envision scenarios by asking, 'What will it mean for my patient if he/she cannot travel across the bridge?' Only after this question is answered, can you come up with possible solutions," said Donahue.

Other positives observed by Donahue were the networking and identification of key players that occurred as a result of the meeting.

"Bringing these different professionals together provided insight about resources that hadn't been thought of before. For some of the resources needed, we learned about a whole range of key players that need to be brought in the loop," said Donahue, who is eager to bring all necessary providers on board as soon as possible to minimize obstacles later.

The teams formed at this meeting will



Photo courtesy Jefferson Transit

Carl Thompson, Jefferson Transit driver, helps a customer to a medical appointment.

continue to communicate and work together to formulate strategies for addressing medical concerns caused by the bridge closure. The medical effort is part of an overall WSDOT effort to develop a mitigation plan that responds to the temporary impacts resulting from the bridge construction.

For more information about the medical mitigation effort, contact WSDOT representative George Kovich at (360) 704-3207 or via e-mail at KovichG@wsdot.wa.gov.

Beck

from page 1 years.

As for the upcoming eightweek closure of the bridge in 2006 to replace the pontoons on the east half of the bridge, Beck understands.

"It has to be done. I've been under the bridge and I see the need," said Beck. "I just wish we could get it done faster, but I understand. The permit process is lengthy."

No longer a daily bridge user, Beck's concern of the upcoming closure falls to his daughter who attends Olympic Peninsula College.

"Life here in the south (Jefferson) county is completely wrapped up in that bridge. We depend on that bridge to get

Hood Canal Bridge 2006 Closure Plan

The closure mitigation plan includes five main components:

- Passenger only foot ferry service between South Point and Port Gamble including transit connections.
- Transportation enhancements for those with medical needs.
- A web-based ride share program.
- An extensive public outreach effort.
- US 101 passing lanes in Mt. Walker vicinity

medical attention, groceries, clothes, etc.," Beck said. "But people don't think about the technical and educational impacts that closing the bridge can create."

WSDOT and the PRTPO have been working hard for more than two years to address the public need and identify transportation options to aid the traveling public while the east half of the bridge is being replaced.

Together with community leaders and the public, a closure mitigation plan was developed. Components of the plan include:

 Passenger only foot ferry service between South Point and Port Gamble including transit connections.

- Transportation enhancements for those with medical needs.
- A web-based ride share program.
- An extensive public outreach effort.
- US 101 passing lanes in Mt. Walker vicinity

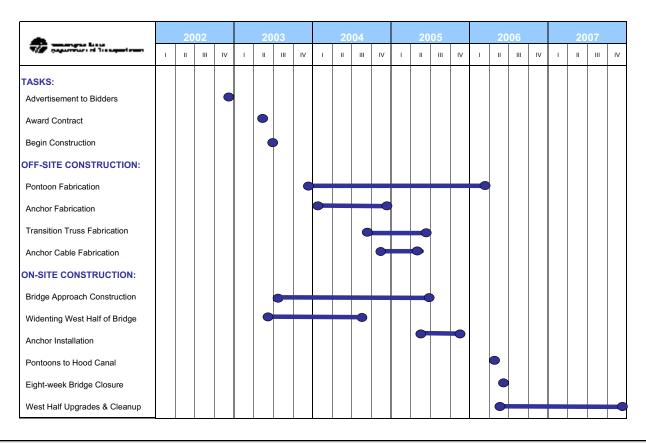
Beck said he prefers a planned closure, avoiding another long-term forced closure due to bridge malfunction.

"It's a while off, but it's getting closer. I think the sooner it's done, the happier people will be."

For a detailed look at the Hood Canal Bridge East-Half Replacement Closure Mitigation Plan – Preferred Options, visit www.wsdot.wa.gov/projects/sr104hoodcanalbridgeeast.

HOOD CANAL BRIDGE EAST-HALF REPLACEMENT PROJECT

Summary Schedule





Hood Canal Bridge Retrofit and East-Half Replacement Project WSDOT Olympic Region 8293 Spring Creek Road SE Port Orchard, WA 98367-8192 PRSRT STD U.S. POSTAGE PAID Olympia, WA PERMIT NO. ????